THE EMBODIMENTS OF THE INVENTION IN WHICH AN EXCLUSIVE PROPERTY OR PRIVILEGE IS CLAIMED ARE DEFINED AS FOLLOWS:

1. A liquid for producing a marker vapour, comprising:

a fluorescent substance in solution in a carrier liquid, the fluorescent substance having a first vapourization temperature range at which the fluorescent substance vapourizes and the carrier liquid having a second vapourization temperature range at which the carrier liquid vapourizes and the second vapourization temperature range overlapping the first vapourization range.

2. The liquid for producing a marker vapour as defined in Claim 1, wherein the fluorescent substance has a first critical point at which the liquid and vapour phases of the fluorescent substance are in equilibrium, and the carrier liquid has a second critical point at which the liquid and vapour phases of the carrier liquid are at equilibrium, the first critical point and the second critical point being substantially the same.

3. The liquid for producing a marker vapour as defined in Claim 1, wherein the fluorescent substance and the carrier liquid are non-toxic.

4. The liquid for producing a marker vapour as defined in Claim 1, wherein the carrier liquid is one of oil and glycerine.

5. A method of producing a marker vapour, comprising the steps of:

providing a fluorescent marker liquid consisting of a fluorescent substance in solution in a carrier liquid, the fluorescent substance having a first vapourization temperature range at which the fluorescent substance vapourizes and the carrier liquid having a second vapourization temperature range at which the carrier liquid vapourizes, the second vapourization temperature range overlapping the first vapourization range; and

vapourizing the fluorescent marker liquid at a temperature that is within both the first vapourization temperature range and the second vapourization temperature range, thereby forming a vapour that is visible when exposed to radiation of suitable wavelength.

6. The method as defined in Claim 5, wherein the fluorescent substance has a first critical point at which the liquid and vapour phases of the fluorescent substance are in equilibrium, and the carrier liquid has a second critical point at which the liquid and vapour phases of the carrier liquid are at equilibrium, the first critical point and the second critical point being substantially the same.

7. The method as defined in Claim 5, the fluorescent marker liquid being vapourized by application onto a heated substrate.

8. The method as defined in Claim 7, the application of the fluorescent marker liquid onto the heated substrate being by atomizing through an atomizing nozzle.

9. The method as defined in Claim 7, the heated substrate being a concave surface.

10. A method of inspection with marker vapour, comprising the steps of:

providing a fluorescent marker liquid consisting of a carrier liquid containing a fluorescent substance;

vapourizing the marker liquid to produce a marker vapour;

directing the marker vapour into a pressure container being inspected for pressure leaks;

inspecting an exterior of the pressure container under radiation of suitable wavelength to cause the fluorescent substance to fluoresce.

11. The method as defined in Claim 10, including the further step of gradually increasing pressure in the container while continuing to inspect the pressure container under radiation of suitable wavelength.

12. The method as defined in Claim 10, the marker liquid consisting of a fluorescent substance in solution in a carrier liquid, the fluorescent substance having a first vapourization temperature range at which the fluorescent substance vapourizes and the carrier liquid having a second vapourization temperature range at which the carrier liquid vapourizes and the second vapourization temperature range overlapping the first vapourization range.

13. The method as defined in Claim 12, wherein the fluorescent substance has a first critical point at which the liquid and vapour phases of the fluorescent substance are in equilibrium, and the carrier liquid has a second critical point at which the liquid and vapour phases of the carrier liquid are at equilibrium, the first critical point and the second critical point being substantially the same.

14. The method as defined in Claim 10, the fluorescent marker liquid being vapourized by application onto a heated substrate.

15. The method as defined in Claim 14, the application of the fluorescent marker liquid onto the heated substrate being by atomizing through an atomizing nozzle.

16. The method as defined in Claim 14, the heated substrate being a concave surface.